

Know what you're putting in your nose!!!

Here at last is a book on cocaine that gives useful information for the consumer.

INCLUDES:

- Clear instructions for performing the simple clorox test as well as the melting point test, with charts and color photographs to help evaluate the results.
- How to identify the effects and reactions of common adulterants in illicit cocaine.
- The cocaine trade and how to score.
- Health and safety procedures for cocaine users.
- History and bibliography.

8 pages of color photos show the results of the clorox test, and the appearance of cocaine and common adulterants under a microscope.

With this book, you will be able to safeguard yourself from adulterants, burns, and inferior quality by learning to know what you're getting before you buy.



4.95

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COCAINE

Consumer's Handbook



David Lee

COCAINE REACTION REFERENCE CHART

Substance	Melting Point	Capillary Reaction	Clorox Results	Comments
Pharmaceutical Cocaine	197°C.	Melts clean—no residue.	Hesitates on surface for 15 seconds—then trails toward bottom—trails appear milky—disappears completely.	Bitter-tasting derivative of coca plant. Crystalline form, stimulating effect, numbs on contact in about 3 minutes
Illicit Cocaine	varies with purity	Melts clean—no residue	Hesitates 5-10 seconds on surface—then trails toward bottom—trails appear milky—oil spot remains on surface.	Due to differences in illicit cocaine, reaction will vary slightly. Rough underground coca derivative, seldom matches pharmaceutical in quality. Same effects.
Mannitol	168°C.	Melts clean—no residue	Drops immediately to bottom—does not dissolve—remains on bottom and resembles layer of powder.	Also known as mannite, menit, menita. White crystalline appearance, slightly sweet to taste. Harmless.
Lactose	222°C.	Blackens capillaries at 182°	Drops immediately to bottom—does not dissolve—remains on bottom and appears grainy.	Also known as milk sugar. White crystalline appearance. Moderately sweet taste. Harmless.
Dextrose	149°C.	Blackens capillaries at 149°	Same as lactose	Sugar made from starch. Moderately sweet to taste. Harmless
Sucrose	185°C.	Blackens capillaries at 185°	Trails down and lays on bottom.	Sugar made from beets, cane and maple. Harmless
Inositol	250°C.	Turns amber at 172°	Drops sparkling grains immediately which disappear halfway down glass—grainy residue on both surface of clorox and bottom of glass.	Vitamin B compound, sweet to taste.
Quinine	95°C.	Stretches melt point 25-40° when mixed	Bursts across surface of clorox with fizzing action—draws together on surface into a red spot after few minutes.	Should be avoided—see adulterants. Derived from cinchona bark. Bitter taste, needle crystals.
Procaine	165-169°C.	Melts clean.	Drops straight to bottom and bursts into red or orange color.	Also known as lidocaine or xylocaine. Should be avoided—see adulterants. Numbs quickly and thoroughly
Amphetamines	300°C.	Decomposes instead of melts.	Leaves pink trails	Heavy stimulating effect, very bitter to taste. Should be avoided.
Heroin	130°C.	Melts clean.		Habit-forming morphine derivative, sedative effects. Can be fatal ingested in same amount as normal cocaine dose.

COCAINE CONSUMER'S HANDBOOK

COCAINE

Consumer's Handbook

by David Lee

PHOTOS BY LINDA KESNER

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The publisher does not advocate the breaking of the law. The material herein is presented as information which should be available to the public.

- CONTENTS -

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PREFACE	ix
INTRODUCTION	1
COCAINE & HEALTH	3
UNDERSTANDING THE COCAINE TRADE	7
COCAINE APPEARANCE & VARIETIES	13
ADULTERANTS	15
CLOROX TEST	19
MELTING POINT TEST	25
ALTERNATIVE TESTS	37
APPENDIX I Cocaine Addiction	39
APPENDIX II Discontinuing Cocaine Abuse	43
APPENDIX III Quinine Deaths	46
CHRONOLOGY	49
BIBLIOGRAPHY	53



PREFACE

This book does not advocate the use, possession or sale of cocaine. The reader should understand that the use, possession and sale of cocaine are illegal. Still, the fact that cocaine use is illegal has not deterred hundreds of thousands of users. These users daily place their health and lives directly into the hands of the illicit suppliers who manufacture, import and distribute cocaine throughout the United States. The responsibility clearly rests with the suppliers to ensure the user is presented with cocaine of a pure nature that has no harmful adulterants. The performance of suppliers regarding this responsibility suggests they do not take it seriously. The user is left with the choice of trusting the black market or learning to identify the content of his purchase. The author feels a moral and human responsibility to present this information and it is in this spirit he presents this book.

Special mention is due two books which have provided the author with dimension and insight in the preparation of this book. Both are highly recommended as additional reading:

PREFACE

The History of Coca (AND/OR Press, 1974), by W. Golden Mortimer. Originally published in 1901, it remains the most accomplished and complete work available on the discovery, development, and impact of coca use in history.

Licit and Illicit Drugs (Little, Brown, and Co., 1972), by Edward M. Brecher and the editors of *Consumer Reports*, traces the development, use and control of cocaine to current times and provides one of the most objective works on the effects, distribution, and legalities of cocaine use and traffic available.

The author wishes to thank all the friends who have helped him through the years. Special appreciation must go to Joe, Laurie, Frank, Joseph, John, Linda, Carl, Eddie, Ned, Paul, Earl, Scott, and others who prefer to remain nameless.

Finally, the author's gratitude must be expressed to the people at AND/OR Press whose efforts, professional expertise and moral support have transformed a handful of typewritten pages into a thing of beauty.



INTRODUCTION

In recent years, many books have been published about cocaine in the United States. Almost all of those publications, while conveying valuable information, have not addressed the problems facing the American consumer. The purpose of this book is to provide the reader with the tools necessary to develop expertise and knowledge of illicit cocaine.

We will discuss problems encountered by both the user and the dealer, and suggest ways of reacting to those problems. We will attempt to give the reader an idea of what may be found on the illicit market, what adulterants may be present in cocaine, several tests for strength and purity, and how to interrelate tests to check your results.

By reading this book and applying the results several times in practical situations, the reader should quickly develop his perception to the point of total confidence in his judgment at the marketplace.

Nevertheless, the publication of this information is not an endorsement for the use of cocaine. It is presented as an answer to ex-

INTRODUCTION

isting problems. Cocaine use in the United States is widespread and gaining popularity rapidly. Historically, people have made their own choice regarding the ingestion of consciousness-altering substances. Without this information, the choice is no longer theirs. The cocaine they purchase may be, and usually is, diluted with alternate substances, many of which are harmful. A practical guide such as this book can help correct that situation.

Due to the nature of cocaine and the myths that surround it, even a practical book on the subject should make an artistic statement. No better statement exists than the following from Pitigrilli's classic novel, "Cocaine," published in Italy in 1921:

"Sure, we all kill ourselves. All of us, men of our times. And the spreading cocaine venom is but a symbol of the death to which we all succumb. Cocaine is not merely the hydrochlorate of cocaine; it is also the fierce and subtle and sweet death—truly, a thing of black shadows, like some nameless cataclysm, which we inflict upon ourselves voluntarily, with different voices and different words, while waiting for the consummation of our fate."



COCAINE AND HEALTH

As noted in the introduction, the purpose of this book is to address common problems associated with cocaine use. Cocaine use over both short and extended periods can lead to many health problems. For this reason, our first section shall deal with health.

Cocaine use through the centuries provides strong evidence of the existence of positive qualities in cocaine. This is again borne out by the extremely rapid rise of the use of cocaine in the United States in the last five years. These positive qualities are so distinctive that the negative characteristics are often ignored, unrecognized or misunderstood by the user of cocaine. These negative characteristics can be extremely debilitating and the understanding of their nature and a knowledge of how to compensate for them should be foremost in the minds of all cocaine users.

The two most common methods of cocaine ingestion are inhalation or injection. Injection of any substance by its nature is extremely hard on the circulatory system and should never be done. Injection of

COCAINE AND HEALTH

cocaine is even worse than most substances as it will strain the heart unmercifully and is shortlived, leading to further and frequent injections which compound the strain. Many of the substances used to adulterate cocaine are extremely harmful when injected; some are fatal. Also, the injection of cocaine can leave abscesses in the skin. This method should be avoided at all costs. Most users of cocaine that tried injection have discovered these facts and no longer subject themselves to the dangers present in this method.

Most users of cocaine use inhalation as the method of ingestion. This is accomplished by chopping the cocaine thoroughly and sniffing it into the nasal passages, either from a small spoon or through a straw. The nasal membranes suffer greatly with extended use and should be protected. When cocaine sits on the surface of the membrane covering the interior nasal and sinus passages, it will cause burns and sores. Over a period of time this can lead to the degeneration of the membranes and can also eat through the cartilage itself. It is helpful in preventing this condition to wash the nasal passages out with warm water before retiring for the evening. A light spray of warm water, using a vaporizer, during the period cocaine is used will be helpful in preventing damage and helps cocaine enter the system.

The effects of cocaine upon ingestion will begin to be felt almost immediately, with the full effects taking about fifteen minutes to arrive. The heart rate increases and blood pressure rises. The appetite is depressed and alertness increases. Fatigue disappears and a euphoric condition becomes evident. The user is filled with energy and his mood is elevated considerably. However, these are but half of the effects of the cocaine experience.

After a period varying from one to two and one-half hours, the effects shift from a stimulant to a depressant, both physically and psychologically. Blood pressure and pulse rate drop to a level less than existed before ingestion. Alertness disappears, leaving the user feeling dull, depressed. The negative reactions seem more pronounced with the absence of the initial positive reaction. The larger the initial

COCAINE AND HEALTH

dose, the stronger the initial high is, and the stronger the eventual negative effects.

Cocaine overdoses have been known to occur. The symptoms are the depression of the respiratory system. If this occurs, make sure the tongue has not been swallowed and administer artificial respiration. Either call an ambulance or rush the person immediately to a hospital. Fatal doses have been computed at from between .2 to 1.2 grams, but these figures are suspect due to the extreme differences of tolerance to cocaine present in different people.

As the high wears off, the negative reaction is such a contrast and so intense that the user is inclined to counteract it by ingesting more cocaine. Prolonged use will lead to hyperstimulation, headaches, nausea, irregular respiration, anxiety, and sometimes even convulsions. Over an extended period of time, this can lead to digestive disorders, severe weight loss, malnutrition, chronic insomnia and paranoid delusions.

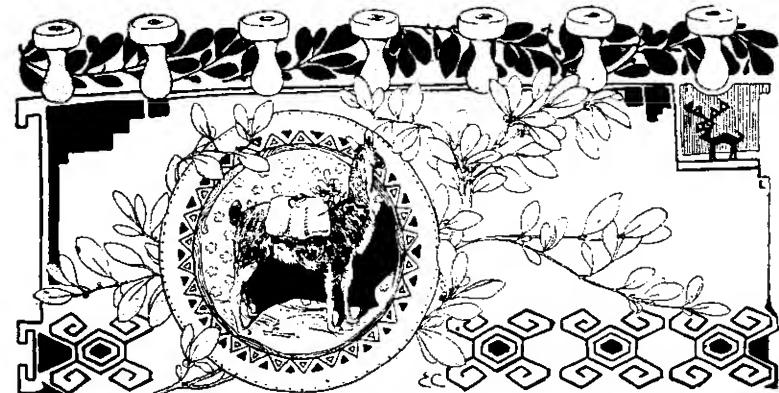
The chronic user should keep these effects in mind and, if periodic abstinence is beyond their will power, should take precautions to counteract these effects. A balanced diet is extremely important. When the user does not feel like eating, he should force himself to eat. Cocaine use burns energy from the body at an extremely rapid rate and energy levels should be maintained. Liquid intake is important as cocaine use dehydrates the body. If cocaine is consumed over an extended period of time along with large amounts of alcohol, the alcohol will be absorbed into the tissues extremely fast due to this dehydration, which can cause alcohol poisoning. To avoid poisoning, take in water or fruit juices while snorting cocaine and drinking. A good vitamin supplement schedule will do much to avoid malnutrition, and extra doses of vitamin C are necessary as cocaine use will strip the body of this vitamin.

Cocaine will also present the chronic user with psychological problems. Among these are paranoid delusions, hallucinations, anxiety, depression and confusion of the decision-making processes. Con-

COCAINE AND HEALTH

centration, comprehension and reaction ability will be markedly impaired. These symptoms can appear after the cocaine high has worn off or while still under the influence. The effect will vary according to the tolerance of the user, the amount used, the period of time spent under the influence of cocaine and the psychological stability of the user. Hallucinations generally take the form of visual spots or itching and crawling sensations on the skin.

Cocaine use is not physiologically addicting, but can be psychologically addictive. While there is a fine definitive line, addiction is still addiction. The net results and life-experience remain the same. Cocaine does affect judgment, and if prolonged use is the case, the user should be aware of this and consider the eventual result.



UNDERSTANDING THE COCAINE TRADE

The experience of the cocaine consumer in the United States has been all too often dismal and disappointing. Generally, this is due to a combination of circumstances. The novice must depend on his source for information about the nature and purity of cocaine. Naturally, his source has a financial interest in the cocaine transaction. The source is often as uninformed as the consumer. An unscrupulous source finds he can increase his profits by adulterating or light-weighting his cocaine, sometimes both, which means he would be the least interested in passing along meaningful information about cocaine. Without an alternate reference, the novice will often find each purchase to be an expensive lesson.

As cocaine use, sales, and possession are illegal in the United States, it joins the long list of substances and services which are distributed by the black market. The outer manifestation of this distribution network is the street-level dealer-user. The dealer-user is naturally cautious about forming contacts with customers and most of his clientele are referred by friends. The consumer's first contact with

UNDERSTANDING THE COCAINE TRADE

his source is generally a social event. The bond that is formed usually is a combination best described as friendly business. If business must be done, this combination is certainly the best. It can also be the worst if either party feels they have been deceived, as they will regard the relationship differently than just business. In other words, they will feel "ripped off" by a friend. The consumer can best avoid this situation by combining a sound cocaine education with good judgment.

It is not the aim of this book to teach people how to deal cocaine. Still, the street level buyer of cocaine is constantly exposed to dealer-users who defray the cost of their personal cocaine by selling moderate quantitites. The consumer should be aware of how cocaine is handled, what problems exist to his source, and what profit is generally made. Some insight into these areas will help the consumer deal with situations that would be otherwise unexpected.

Contrary to the image recent media releases have pictured, the average street dealer is far from a "superfly." In most cases he will be a person who likes cocaine and buys it in moderate quantities to sell enough to pay for his own consumption. A common model of the dealer-user is the low-level marijuana dealer who occasionally sells cocaine. This person normally makes money selling marijuana, but tends to take cocaine as his profit on cocaine transactions. The street level seller of cocaine that realizes a good profit usually is turning it over in an extremely rapid manner or adulterating it, the latter being most often the case.

The risks involved, legal penalties aside, are not too different from those of the consumer. He must exercise caution when "scoring" to ensure the commodity is good and the weight correct. He must take care not to get too involved with ingestion of his profits before he has actually turned the profit as such a practice will reduce his working capital.

The most common purchase at this level is one-quarter to one-half ounce (7-14 grams). Hard and costly lessons have taught him

UNDERSTANDING THE COCAINE TRADE

not to buy from samples, and to pass any score that arouses any question in his mind. He has learned not to "front" his money (another term for giving his money to his supplier for use in scoring), to always test and weigh the purchase before payment, and not to deal with anyone he doesn't trust.

With the purchase accomplished, the cocaine is then broken down into smaller amounts, usually half-grams and grams. The measured amounts are usually placed in a hand-folded envelope (see inside back cover) made from smooth, thick paper. A practiced supplier will usually avoid paper with dark printing which will tint the cocaine. Index cards are of the desired consistency and strength. This package is now ready for the consumer.

The price the consumer pays is extremely variable, with prices from an importer varying year to year, and fluxing at the consumer level depending on quality. Usually, a dealer-user tends to make one gram on a purchase of one-quarter ounce. For example, if the quarter ounce costs \$450, that amount would be divided by 6, which is the number of grams to be sold. The result would be a gram price of \$75. Increasingly, dealer-users are striving to obtain higher profits by light-weighting their consumer quantities. The nine-tenths of a gram "gram" is very common. The result is an extra half-gram to sell and a little extra for the dealer-user's consumption. The consumer should ask the seller at the time of purchase what weight is represented. Many times the difference will be represented in the price. For example, the net cost of nine-tenths of a gram of cocaine sold for seventy dollars would be the same as paying \$77.75 a gram. The best way to avoid feeling cheated is to understand precisely what you are buying. Don't be afraid to ask.

The consumer should understand that constant ingestion of cocaine, as with many other substances, can impair the user's judgment. A dealer-user that adulterates his product exhibits poor integrity. Poor integrity aggravated by impaired judgment often leads to the adulteration of cocaine to such a degree as to render the substance useless or dangerous. The tests in this book will give the novice the

UNDERSTANDING THE COCAINE TRADE

skill necessary to identify adulterants. If the user finds he is dissatisfied with his source, a determination should be made as to whether his source lacks integrity or expertise. A copy of this book should correct a lack of expertise. A lack of integrity can best be corrected by finding a different source for cocaine.

On a more positive note, the dealer who has consistently treated his customer with respect and consideration and has supplied the buyer with a good product at fair weights over a period of time exhibits good integrity. When such integrity is exhibited regularly, the buyer can feel reasonably assured his source will always treat his buyers in such a fashion. Even so, the nature of the cocaine trade dictates a policy of double-checking your source occasionally. This can be a delicate situation, especially if the buyer values his source or the seller is prone to interpreting such checks as a questioning of his integrity.

If a large quantity is involved, the buyer should never make his purchase until after he has weighed and tested it. The seller should always expect such tests in large transactions. If the transaction is relatively small (one gram or less), the situation can become delicate. The clorox test is ideal for such a situation as the amount of cocaine used in the test is minute and the results are both quick and clear. A small, tightly-capped bottle of clorox should always be with you when a purchase is made. If a test seems to annoy or offend the seller, the buyer could say he has violent allergic reactions to some substances used to adulterate cocaine and must be quite certain these agents are not present in his purchase. An explanation of this type makes taking offense difficult and is sufficient to any seller who has confidence in his product.

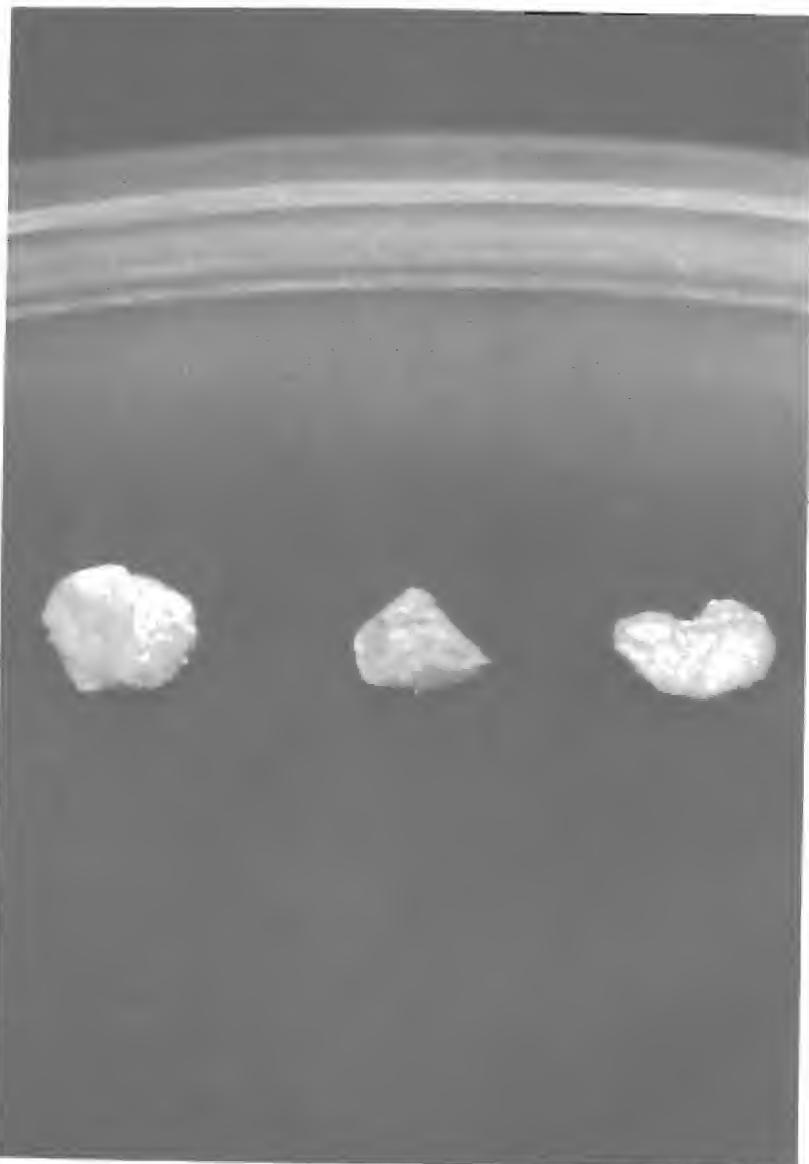
Checking weights on small amounts is also difficult. Generally, the buyer will wish to try a line of what he is to buy. This trial should always be done from the package you are actually purchasing. Due to the social relationship that develops between a supplier and regular customer, many times the customer will also turn his source on to a line, usually with reciprocation. While this is a pleasant social exper-

UNDERSTANDING THE COCAINE TRADE

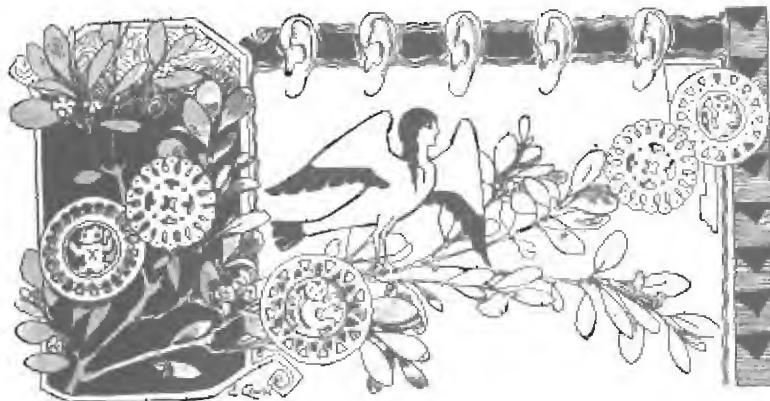
ience, it makes weight checks very difficult. A way to double check your source periodically would be to purchase two half-grams instead of one gram. An explanation that half of the purchase is for a friend will suffice. Then the buyer can pick one of the two to be looked at and tried. The other can be weighed at the buyer's leisure.

Combining periodic checks with good intuition, both the buyer and seller should arrive at a relationship which is mutually rewarding and satisfactory. If a discrepancy is noted on a purchase from a seller whom the buyer has regarded as reliable, the buyer should feel free to return to the seller to discuss the transaction. The seller will almost always attempt to satisfy a regular customer. The buyer in this situation should avoid jumping to conclusions and approach the seller in a reasonable manner. The seller should respond by examining the circumstances from the customer's point of view. If this approach is taken by both parties, the results are usually satisfying.





Three main types of cocaine, from left to right: Bolivian Flake, Bolivian Rock, and Peruvian Flake.



COCAINE APPEARANCE AND VARIETIES

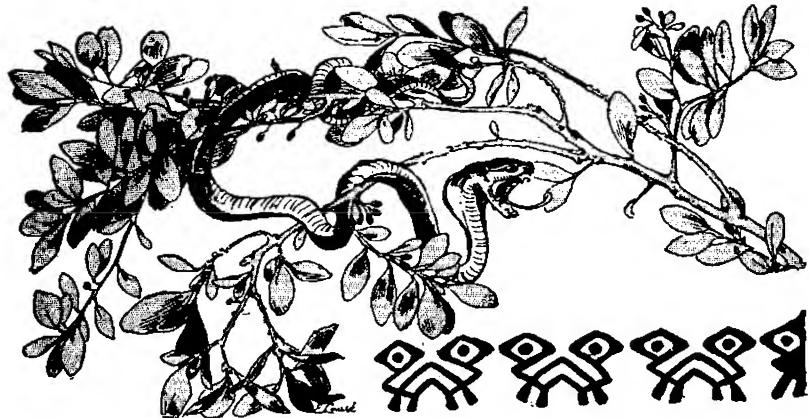
Coca plants are grown in Peru, Bolivia and Ecuador. The leaves are harvested and reduced to paste which is transported to Colombia or Mexico, where the great majority of illicit cocaine available in this country is refined. The finished product, due to different refining processes, will take the form of either flake or rock. The purity of the product will range from eighty to eighty-eight per cent. Very rarely will it be any purer, and then only to a small degree.

There are two main kinds of coca plant which differ from each other much in the same way that differences exist in varieties of coffee beans and marijuana. The effects upon ingestion will vary due to different alkaloid constructions in the leaves. The Bolivian variety will react quite strongly in the human system, while Peruvian cocaine will display a purer and mellower high. Peruvian cocaine will smell lightly medicinal when snorted and is usually very easy on the nasal membranes. Bolivian cocaine is usually harder on the nasal passages and has a smell variously described as reminiscent of dusty socks, or cat urine. These effects can be muted depending on the place refined

COCAINE APPEARANCE AND VARIETIES

and technique used. With experience, the user will generally be able to detect the difference.

Cocaine can have many appearances when found on the retail market. This could be due to the care taken to isolate the cocaine alkaloid when refined. If some steps are left out of the process, the result will be the presence of by-product alkaloids in the final product, usually producing a chalky appearance. The look could be altered by an adulterant, and sometimes by different smuggling techniques. Pure flake should appear translucent and crystalline, with sometimes a rose color appearing as a light tint. Bolivian rock in a refined state has a yellow tint, sometimes even a strong yellow color throughout. Usually, these characteristics are seen only in highest quality cocaine. If your purchase does not follow these descriptions, it does not necessarily mean the cocaine is bad; it only indicates the quality is not top-flight connoisseur quality.



ADULTERANTS

As cocaine is brought into the United States, many times it is at that point adulterated to stretch its value. An "import step" is done quite professionally, usually by reducing the cocaine and adulterant to liquid and reconstituting it to a rock, which will appear as a slab. When it is adulterated on the consumer level, most often the adulterant is mixed with the cocaine and passed through a screen to distribute it evenly. A street level hit is generally referred to as a "kitchen hit." By following the methods in the test section of this book, it is generally easy to identify adulterants, regardless of the method used to adulterate, or "hit," cocaine.

The adulterants discussed in the following paragraphs are by far the most commonly used agents. However, occasionally an agent will be used that is not listed. Most exceptions will be due to the cocaine passing through the hands of an unscrupulous novice street dealer. Also, it is a certainty that, as consumer expertise improves, the black market will try to find an agent that will be harder to detect. The consumer can protect himself best by combining sound knowledge of co-

ADULTERANTS

caine and testing procedures with common sense. If the consumer is aware of the reaction of cocaine to tests and upon ingestion, it will be logical to assume an unknown reaction is an adulterant.

The most common agent used in cocaine adulteration is mannitol, also known as mannite, menit, or menita. If cocaine must be adulterated, this mild baby laxative is by far the least harmful in terms of ill effects on the body and to the cocaine. Due to many similarities between the way cocaine and mannitol crystallize, it is normally the agent used when cocaine is reduced to a liquid, adulterated, and reconstituted.

Sugar hits such as lactose and dextrose are very widely used and are fairly harmless. However, they will dull the cocaine and cause post-nasal drip.

Inositol is a vitamin B compound which will produce a dripping nose to a greater extent than lactose. Due to the easy availability of inositol, it has been increasingly used at the street level.

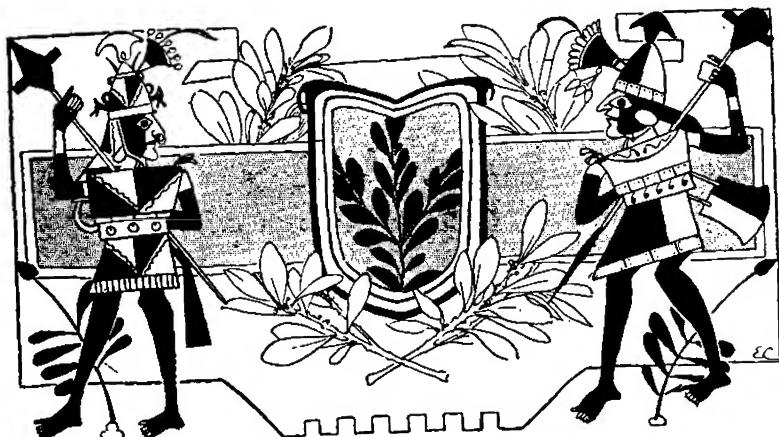
Quinine, primarily in the past an agent for stretching heroin, is sometimes found in cocaine. It is strongly recommended that cocaine with this adulteration not be ingested. Quinine will produce a reaction in the body separate from cocaine. The state of mood produced when quinine is ingested is somewhat depressed. It will cause a ringing in the ears, will impair vision, and can lead to nausea and headache. The nasal membranes will become quite abraded with continued ingestion. These effects do not usually make themselves evident from initial ingestion, but will become quite pronounced after frequent ingestion over several hours. Luckily, quinine is very easy to detect in both the clorox test and in the melt point test. (See test section.)

Local anesthetics, usually procaine, are not often used to adulterate cocaine, but are used many times to create a product similar to cocaine. If cocaine is encountered which has been stretched with procaine, ingestion is discouraged as an allergic reaction is not uncommon as well as a numbing effect on the face which is quite unpleasant and lasts for many hours. As a warning to the burn artist who may

ADULTERANTS

possibly read these words, you are reminded that it is impossible to determine where your burn will eventually be consumed. If by chance a local anesthetic is injected intravenously, it will quite often cause death. Be warned.

Methamphetamine, Benzedrine, and sometimes Dexedrine are usually the types of "speed" found on the illicit market. Speed is occasionally used as a cocaine adulterant. It is sometimes used to restore the stimulating effect to cocaine that has been adulterated too much. On occasion it has been mixed with other substances in attempts to simulate cocaine, usually procaine or quinine. It is marked by severe stinging in the nose when snorted, an extremely bitter taste, and is easily detected in the clorox test.





Set-up for Clorox test: tall clear glass of Clorox in well-lighted area and finely chopped sample.



CLOROX TEST

Cocaine testing involves somewhat more than hard knowledge of procedures. The tester must also develop a feel for analyzing results and applying common sense. The mechanics of most tests are much easier than you would expect, while the nuances of the results are more important than they would seem. Strangely enough, the simplest test for cocaine is also one of the most comprehensive available, the Clorox test.

The general aim of the Clorox liquid bleach test is to determine the purity of cocaine and to identify any adulterants. Liquid bleach is used as a separating agent on the cocaine, which simply means the bleach will break down the elements present and identify each by their reactions. The test is ideal for small consumers as the procedures are simple, clorox is easily available, cocaine amount used is minute, and the results immediate.

First, you will need a bottle of Clorox and a tall, clear glass. Fill the glass close to the top with bleach and set it under a bright light. Take approximately one-tenth of a gram of cocaine, composed of

CLOROX TEST

about the same ratio of duff and pieces that exist in the whole quantity, and chop very finely with a razor blade. Mix the cocaine thoroughly and lift amount to be tested with a coke spoon or the tip of a knife. This amount should be fairly small. Enough cocaine to snort a very small line will serve for three or four tests. Drop sample very gently to the surface of the clorox by tapping the edge of the glass.

(See color section for comparisons of clorox test results.)

Pure cocaine will set for a period of about ten seconds on the surface of the bleach. It will then trail very slowly toward the bottom of the glass, leaving milky trails in the liquid. It will before long disappear completely with the exception of an oil spot or slick at the top of the glass. This slick is comprised of the natural oils of cocaine which remain after the refining process. Different kinds of unadulterated cocaine will show results that vary slightly. The purest cocaine will hesitate longest before falling (but never more than fifteen seconds), will trail longest while falling, and will disappear completely except for the surface oil spot. With practice, the tester can develop his expertise enough with this test to determine the approximate percent of purity.

When cocaine is cut with mannitol or mannite, it will sink to the bottom of the glass rapidly and lay on the bottom. The residue will appear cloudy, and will lay on the bottom much like a layer of dust. Mannitol is heavier than cocaine and much less soluble. The separation of the mannitol from the cocaine is immediate, with the mannitol falling directly to the bottom and the cocaine starting its slow reaction on the top.

Lactose will drop very quickly in clorox, then lay on the bottom in tiny grains. Dextrose will burst in a fizzing manner on the top to a small degree, then will fall in the same manner as the lactose. The reaction is a little less distinctive than mannitol and must be watched for. The cocaine will then follow with its reaction.

Inositol will drop particles that glisten like tiny raindrops immediately as it touches the surface. These particles disappear halfway

CLOROX TEST

down the glass, with the remainder of the inositol clumped as a residue on the surface and bottom.

Quinine is one of the most easily detectable adulterants. It will burst violently on the surface of the clorox. After it has fizzed across the surface, it will come together in a red dot on the top. It takes a few minutes for the red dot to confirm the initial reaction as quinine. The same initial reaction would be seen if the adulterant were a salt, but instead of a red dot, the salts draw together in the form of clear crystals clumped together on the surface.

A speed cut (methamphetamine sulphate or similar), will result in pink trails instead of a milky appearance. Again, easily identifiable.

Local anesthetics such as lidocaine or procaine will have the quickest and most positive reaction. They will go directly to the bottom and turn bright red or orange.

Curiously enough, the adulterants most harmful to the body and the integrity of the cocaine give the most positive and violent reactions to the clorox test. That characteristic makes the clorox test even more valuable in situations where the buyer must quickly decide whether to make the purchase.

The tester should keep in mind that more than one adulterant may be present, which is a good indicator that the cocaine has been cut far too much to be a reasonable purchase. Many times the tester will see reactions that fall outside the reactions discussed here. The most important part of the bleach test is to recognize the reaction of cocaine and identifying deviations from that reaction. A minute amount of cocaine is involved in this test, so if the first results are not satisfactory or the reaction is confusing, try it again. A recommended procedure is to test first for cocaine, watching only for the reactions of cocaine. For emphasis, those reactions are: hesitation on the surface; slow, milky trails falling toward the bottom; and no residue on either the surface or bottom of the glass with the exception of a small spot of oil on the surface.

CLOROX TEST

Cocaine will react slightly differently with different adulterants. Cocaine is very light and most of the adulterants are much heavier by volume. When a heavy adulterant is present, it will pull the cocaine down much quicker, sometimes even to the bottom. When this happens, the cocaine will rise back up in reverse trails. Another deviation seen quite often is small pieces which drop about two-thirds down the glass, then rise to about one-third from the surface, leaving cocaine trails in its path. This action is repeated until the particles are dissolved. This is caused by a heavy hitting agent which is either sticking to the cocaine or has been reconstituted with the cocaine to resemble pieces. The reaction is triggered by the hit pulling the cocaine down, then dropping off which reduces the weight of the piece. As the piece rises, more cocaine trails off until the weight is adjusted by the pro-rata amount of hitting agent.

If the results are not exactly consistent with a cocaine reaction, a second test should be performed. This time the tester should watch for deviations from the cocaine reaction, and should attempt to identify the adulterant causing the deviation.



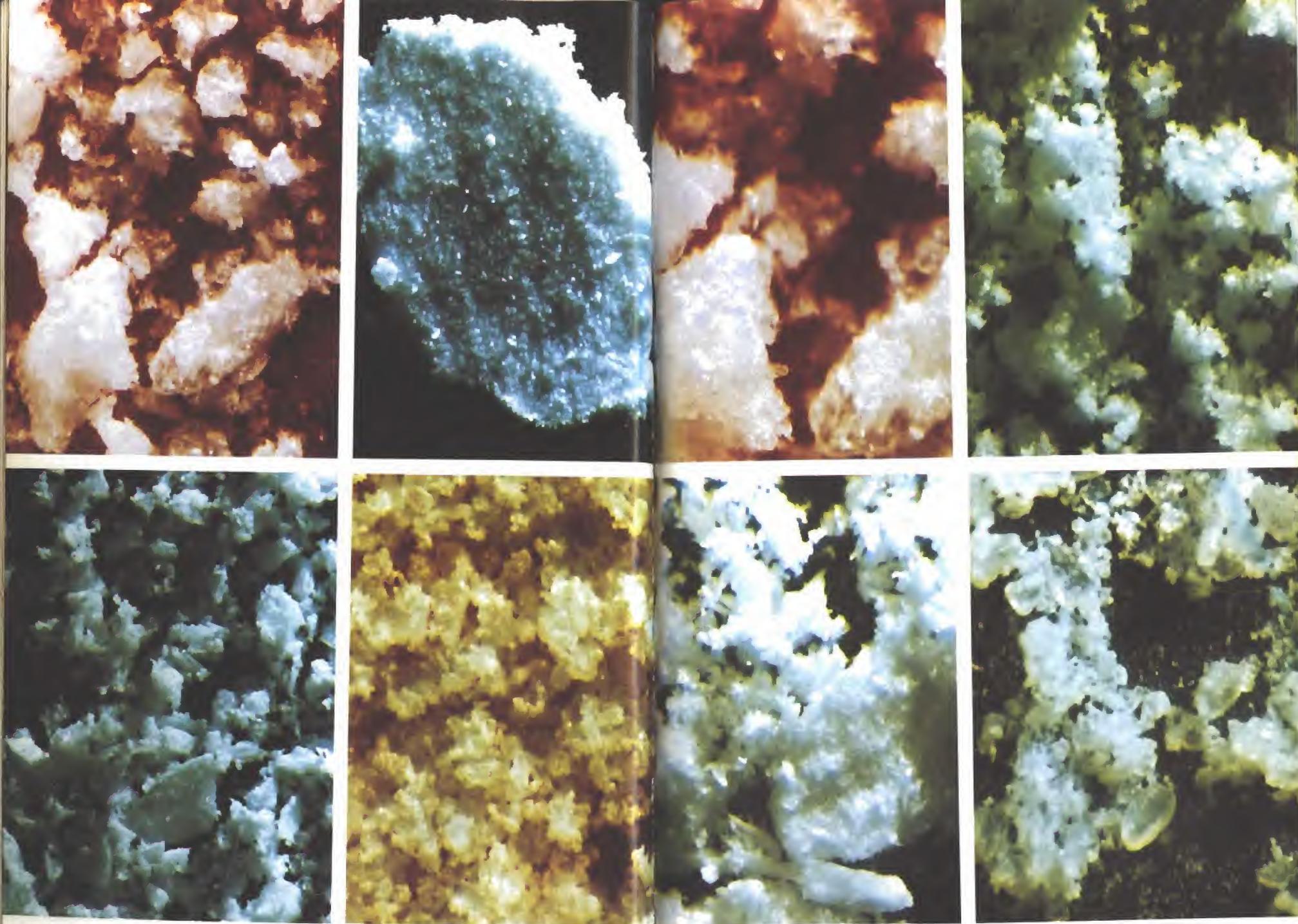
Clorox test: relatively pure coke leaves milky white trails and dissolves before it hits the bottom.

(Text continues after color Section →)



Cocaine is derived from the leaves of the coca plant (which also contain other alkaloids as well as important vitamins and minerals). South American Indians chew fresh or dried leaves as a religious rite, for stamina and to ward off hunger.

Photos this page by E. Throx



SAMPLES MAGNIFIED 21X. Clockwise from upper left: Bolivian flake cocaine, mannitol, lactose, Peruvian flake cocaine. Note that cocaine crystals are translucent white, sharp and irregular in size and shape. Chunk of pressed mannitol powder is opaque white and its crystals are much finer than cocaine.

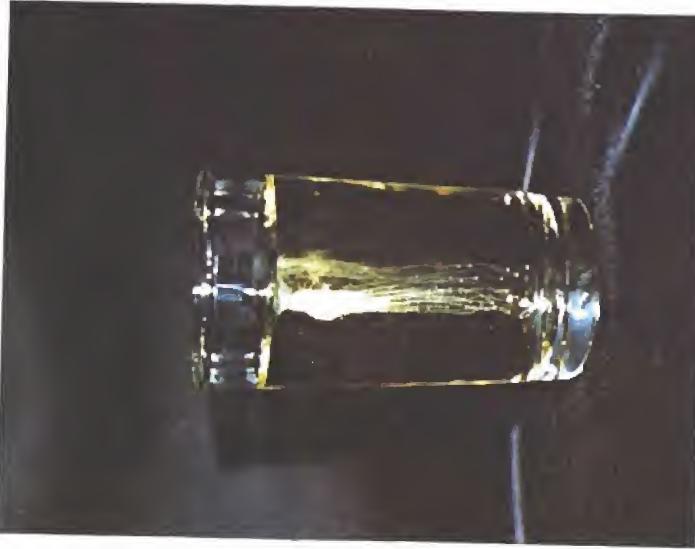
SAMPLES MAGNIFIED 31X. Clockwise from upper left: Bolivian flake cocaine, mannitol, lactose, Peruvian flake cocaine. When further magnified, differences become more obvious: both cocaine samples have sharp, irregular, translucent crystals; mannitol is very fine and white (but not translucent); lactose crystals smooth compared to the cocaine.

CLOROX TEST

(See text for detailed explanation of this test.)



Very pure cocaine, well chopped: dissolves smoothly and slowly in delicate milky trails. A tiny dot of amber-colored natural oil will remain on surface.



Relatively pure cocaine—not well chopped: chunks leave milky trails, but do not dissolve completely before they hit bottom. Will also leave oil spot.



Cocaine cut with mannitol: the coke dissolves, chunks of mannitol fall to bottom of glass.



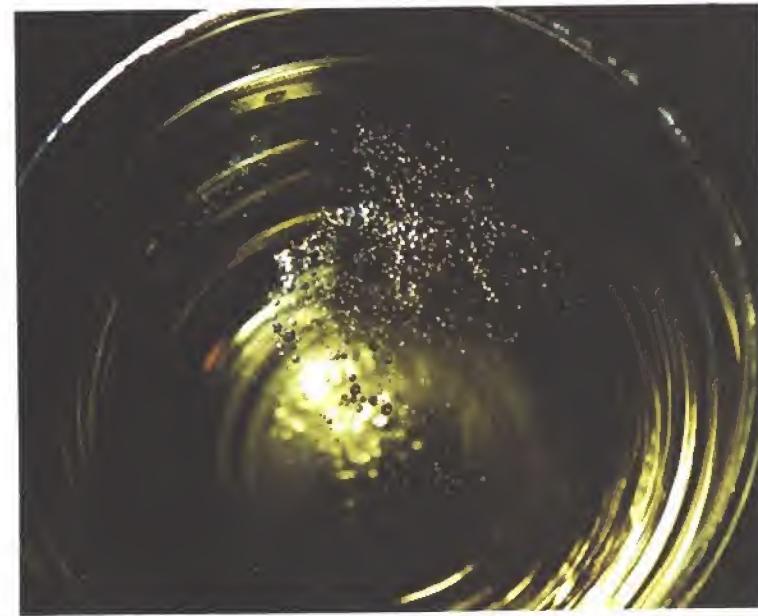
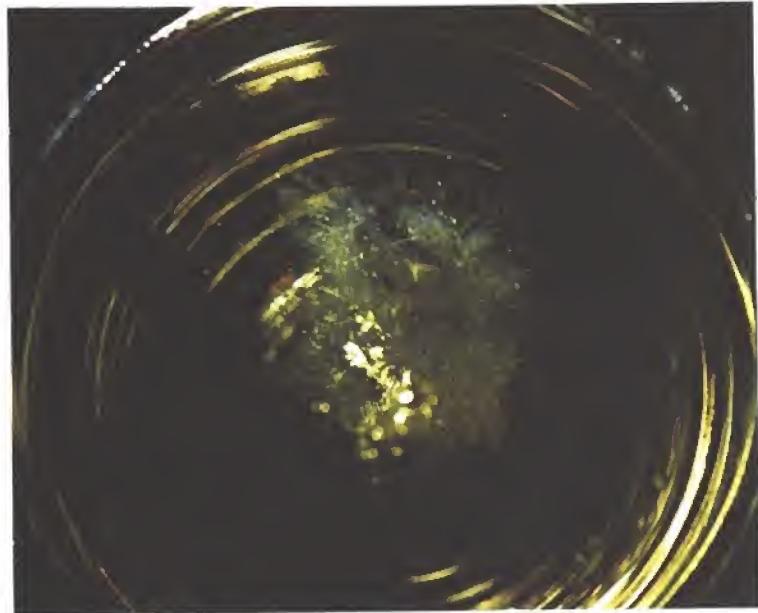
This cocaine was recrystallized with mannitol which pulls the dissolving cocaine to bottom of glass—chunks bounce on bottom, coke continues trailing as it dissolves.



Cocaine cut with lactose: particles of lactose fall ahead of the dissolving trails of cocaine.



After cocaine has completely dissolved, the mannitol cut looks like white dust particles on bottom of glass.



Cocaine cut with quinine: There is an immediate reaction as quinine fizzes outward across surface of clorox. After a few minutes, red oily dots form on surface. In 20-30 minutes, dots will draw together into one red splotch (not shown).

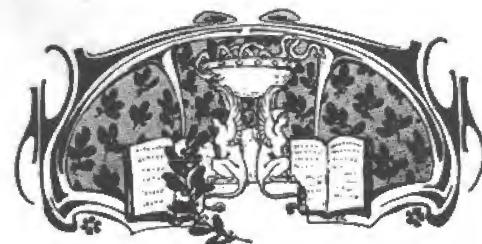


Top: Uncut Peruvian flake cocaine.
Bottom: Uncut Bolivian flake cocaine.

CLOROX TEST

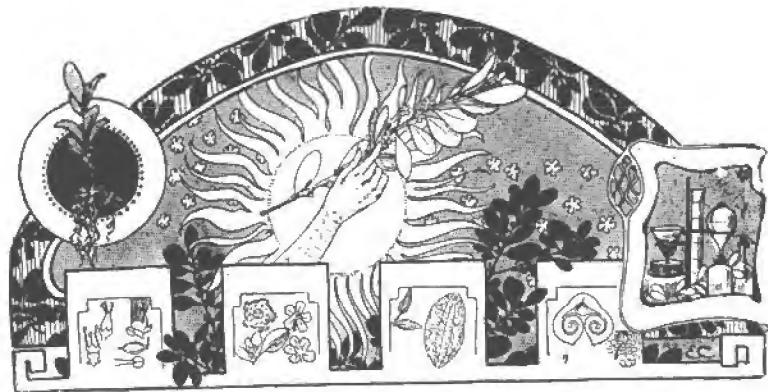
If the adulterant is identified and is a harmless substance (mannitol, lactose, or similar), a third test can be useful in determining how much the cocaine has been adulterated. With practice and experience, a reasonable estimate can be accomplished by measuring the extent of both reactions against the amount used in the test. At this point, a moderate quantity should be consumed by the buyer and a decision can be made by comparing the quality of the cocaine, the nature and extent of the adulterant, and the results achieved upon ingestion with the price.

If the adulterant cannot be identified, it is wise not to make the purchase. Substances ranging from epsom salts to plaster of paris have been used as adulterants, thankfully very rarely. Sometimes even the person responsible for the adulteration has no idea of the adulterant used. An example of how this can happen would be a novice trying to increase the strength of a subpar product with amphetamines. Recently, there have been large amounts of speed tablets (or "beans") sold on the black market which contain little or no amphetamines, and which rely on substances such as caffeine or ephedrine for stimulation. All drugs are either dangerous or can be dangerous in certain circumstances, and many drugs react dangerously with others. Taking chances by ingesting unknown substances can be literally deadly.





Apparatus for melting-point test: alcohol burner, capillary tubes, 250°C. thermometer with wrapped-string stopper, boiling flask full of poppy-seed oil, mirror, blade, straw, and finely chopped sample.



MELTING POINT TEST

For the tester who wishes more than a good estimate of the strength of their cocaine, the melting point test provides a percentage figure accurate to within approximately five percent. The accuracy will depend on such variables as the barometric pressure at the time of the test, how well the test is performed, and what adulterants are present in the cocaine tested. The tester should make allowance for these factors by routinely subtracting a few percentage points from his results.

The object of the test is to arrive at a percentage figure by applying heat to cocaine and measuring the temperature at which it melts. Also, the adulterants can be identified by watching the reaction of the sample when heat is applied. Pharmaceutical cocaine hydrochloride melts at 197° Celsius. Cocaine crystals will not melt below 100° Celsius. Where in this range it does melt is determined by the purity of the cocaine, the percentage by which it is cut, and the type of adulterant used. For example, a sample which melts at 160° Celsius will be approximately sixty percent cocaine.

MELTING POINT TEST

The equipment needed to perform the melting point test is all very basic chemistry paraphernalia, readily available from laboratory equipment suppliers and retail stores catering to chemistry students. A complete list follows:

1. 250° Celsius thermometer, 360 millimeters in length.
2. Asbestos sleeved burette clamp, with round jaws, medium size.
3. Capillary tubes, one end closed. Inside diameter .9–1.1 mm, length 90 mm.
4. Alcohol burner.
5. Alcohol.
6. Florence boiling flask with flat bottom, 250 ml, #5 stopper neck.
7. Poppyseed oil, available at art supply stores. Boiled linseed oil will also work, but is not as clear.
8. Several small, thick rubber bands.
9. Tensor light, razor blades, small mirror or glass.

Affix the bar-clamp to an upright rod over a flat surface. Place the boiling flask in the clamp and tighten until snug. Fill the boiling flask until it is nearly full with poppyseed oil. The oil should be about one-half inch from the neck of the flask. Instead of using a rubber stopper to hold the thermometer in the flask, it is suggested twine be wrapped in a criss-cross fashion around the thermometer until it fits snugly in the neck of the flask (see page 30). The thermometer is both expensive and delicate, and can be easily broken when trying to force it through a stopper. The wrapping should be done in a manner that leaves about one-half inch between the bottom of the flask and the bulb of the thermometer. Place a strong light (a tensor light works well) in a position that illuminates the boiling flask well. Place the alcohol lamp under the boiling flask and position the flask so the tip of the flame is about one-half inch from the bottom of the flask. (Refer to page 30 for setup).

The procedures for accomplishing the melt point test will seem complicated when reading directions. For clarity, it is suggested the

MELTING POINT TEST

tester read this section completely, then follow the directions step by step. After a few trials, you will find it to be actually very simple.

First, select and prepare a sample of the substance to be tested in the same manner outlined in the clorox test. It is always important to make the test on cocaine that has been well chopped and mixed. The quantity actually used in the test is about the amount you would use for one line when snorting.

Next, place the open end of a capillary on the mirror at about a thirty degree angle. Using the razor blade, slide the cocaine into the open end of the capillary (see page 28). Be careful not to overload the capillary too quickly as it will clog in the top, preventing it from falling to the bottom. After each scoop, bring the capillary to an upright position and tamp it lightly as if you were packing a cigarette. This drops the cocaine to the bottom. Repeat several times until there is approximately one-third inch of cocaine in the bottom. Prepare a second capillary in the same manner.

Now the cocaine must be packed tightly in the bottom of the capillaries. This is done by holding an ordinary straw perpendicular to the mirror. Drop the capillary down the straw with the closed end down, allowing it to bounce on the mirror. Repeat several times. This will pack the cocaine tightly, removing most of the air. If there is an air bubble in the cocaine, it will rise as the capillary is heated, causing test results to be inexact.

Place the capillaries next to the thermometer with the closed ends even with the bottom of the bulb. Carefully wrap a rubber band around the thermometer toward the top of the capillaries as shown on page 29. Care must be taken with this step as the capillaries are delicate and easily broken. Make sure they remain flush to the thermometer while wrapping them snugly. Place the thermometer into the boiling flask as shown on page 30. Make sure the flame on the alcohol lamp is adjusted correctly as too close a flame will cause the oil to heat unevenly, altering the results of the test. The temperature should rise approximately ten degrees a minute.



1.



3.



2.

1. Chop sample to a fine powder.
2. Using razor blade, scoop sample into capillary tube.
3. Tamp down by tapping tube on mirror and repeat until there is $\frac{1}{2}$ to $\frac{3}{4}$ inch of sample in capillary tube.



5.



4.

4. Insert capillary into upright straw . . .
5. Bounce on surface of mirror until the sample is well packed, and all air pockets are removed.
6. Two capillary tubes, ready for testing—one contains mannitol, the other, cocaine.
7. Attach filled capillary tubes to thermometer carefully with rubber bands so that samples are even with bulb at bottom of thermometer.



6.



7.



Insert thermometer with attached capillaries into flask of poppy-seed oil. Place alcohol burner so that flame is $\frac{1}{2}$ " from flask. Heat slowly (about 10° C. per minute).

Monitor temperature as it rises: note temperature at which sample begins to melt as well as when it is completely melted.



1. Mannitol, in the capillary on the left, begins to melt at 165° C.



3. The cocaine begins to melt at $185^{\circ}\text{ C.} \dots$



2. It is completely melted at 170° C. while, on the right, the cocaine is still a powder.



4. . . and is completely melted at 190° C. , indicating that the sample was 85%-95% pure.

MELTING POINT TEST

Analyzing and understanding the reactions of cocaine to the melting point test is perhaps difficult to grasp from written instructions. Still, after several tests made on a few different samples of cocaine, the tester should rapidly become adept. Occasionally, illicit cocaine will be tested and found not to follow any pattern described in the following paragraphs. This is generally due to either new or rarely used adulterants, and the reaction of more than one adulterant when combined with cocaine and heat is applied. The best method of coping with those situations is to learn what reaction clean illicit cocaine will produce and what deviations from this reaction are acceptable.

The purity of illicit cocaine direct from import will range from eighty to eighty-eight per cent. With cocaine of this quality, the reaction produced will be quite definite. As an example we will assume we are testing very clean cocaine with an approximate strength of eighty-five percent. As the temperature rises in the thermometer, the cocaine will appear as a tightly packed white powder in the bottom of the capillaries. There will be absolutely no change in appearance until after 180°C. At 183°C., the powder starts losing color, becoming clear. It will look like clear crystals suspended in a clear liquid. It then slowly rises up the capillary, vaporizing and disappearing until, by the time it reaches 187°C., nothing remains. The tester should carefully note the temperature when it begins to melt and when it is gone. An important indicator is the number of degrees required to melt the sample. A spread of between three and five degrees indicates a very clean crystal. A longer spread of six to ten degrees indicates less care in the refining process. A range of more than ten degrees will usually be caused by an adulterant. The percentage can be approximated by splitting the difference between the start and finished temperatures. In the example used, the sample started at 183°C. and finished at 187°C., which would indicate purity of about 85%.

One of the most common adulterants used for stretching cocaine is mannite or mannitol. This substance melts at 168°C. If the manni-

MELTING POINT TEST

tol content is more than 15% of the volume, a reaction will be noted in the capillary before the temperature reaches 168°C. For example, assume you are testing cocaine that was originally 85% that has been adulterated by 30% with mannitol. This would leave the approximate strength at 55%, and is a mix found quite often on the market. The reaction noted with this mix will commence at around 154°C. The substance in the capillary will turn translucent and you will see the cocaine crystals vaporizing. This reaction will end at about 156°C., leaving a fluid-crystal residue in the capillary. The temperature will rise to about 167°C. at which time the remaining substance will vaporize and be totally gone by 170°C. The appearance of mannitol as it melts is quite similar to cocaine melting.

If the amount of mannitol is less than 15% of the volume, the reaction would be reversed. For example, if the substance to be tested had an original strength of 85% and had been adulterated by a 10% addition of mannitol, the basic strength would be 75%. The reaction will begin at about 166°C. The substance in the capillaries will appear as a change to a milky fluid, with cocaine crystals suspended in the fluid. By 170°C., the volume of substance in the capillaries is reduced slightly as the mannitol melts off. What remains will be cocaine crystals that will melt between 174°C. and 178°C., leaving no residue.

Sugar adulterants are almost as common as mannitol. Due to the different kinds of sugars, there are several reactions to note. The most commonly used is lactose, or milk sugar. Lactose actually has a melting temperature of 222°C. However, it blackens in the capillary at 182°C. Once the capillary is blackened, it will be impossible to detect the results of the test if the percentage is over 80%. However, if any lactose is present in the sample, it is very improbable the strength will be that high.

With cocaine originally measuring 81% and adulterated by 25% with lactose, the approximate percentage would be 56%. The reaction would begin at around 153°C. and continue to about 159°C. The

MELTING POINT TEST

reaction observed at these temperatures would be the transformation of the cocaine to crystal suspended in a milky fluid. The cocaine will melt by 159°C., leaving the fluid. At 182°C., the capillaries will blacken.

Dextrose melts at about 150°C., also blackening the capillaries. Because of this reaction, it is extremely difficult to arrive at any percentage figure with this test. When dextrose is detected, a practical alternative would be to determine via the clorox test and ingestion if the cocaine has been badly adulterated. Even if it performs satisfactorily upon ingestion, you would do well to find a different source or advise the seller you will not be interested unless the price is radically cheaper than current market prices.

Sucrose is seldom used due to the extreme sweetness of the substance. When it is encountered it can be easily tasted on the tongue. It will blacken the capillaries and melt at 185°C. The same guidelines should be used as when testing a lactose tainted product.

Procaine will melt clearly between 165°C. and 170°C. The same guidelines used when testing a mannitol tainted product should be used. However, it is strongly recommended this adulteration not be ingested (see adulterant section).

Quinine has a very distinct reaction in this test. It will melt at 95°C., and stretches the melting point of cocaine to extreme lengths. As an example, if the cocaine to be tested was originally 85% pure and has been adulterated by 20% with quinine, it would have an approximate strength of 65%. The reaction would begin at 95°C., as the quinine melts. This melting will be complete by 100 degrees and would leave the cocaine appearing as crystals suspended in a clear fluid. The cocaine would begin to melt at around 140°C. and proceed very slowly. The melting would be complete by around 185°C. Due to the extreme melting spread produced, approximate percentages are much harder to arrive at. As with procaine, it is recommended this adulteration not be ingested (see adulterant section).

MELTING POINT TEST

Inositol will not melt until 250°C. It will turn the capillary a light amber color at 172°C. and the same guidelines for testing cocaine cut with lactose should be followed.

Amphetamines (dexidrine, benzedrine, methamphetamine sulfate, all known commonly as speed) are seldom used to adulterate cocaine. When amphetamines are detected, there is seldom any cocaine present at all. Generally, what will be present would be another substance used to approximate the general appearance of cocaine. These substances could be procaine, quinine, or an inert base. Amphetamines will not decompose until a temperature is reached of 300°C.

Heroin is used even more rarely as a cocaine adulterant. For information purposes, the melting point of heroin is 130°C.



ALTERNATIVE TESTS

There are other tests used by consumers to determine the integrity of their purchase. Most are incomplete or impractical. One of the most commonly used tests is the foil burn test. The idea is to place a small amount of cocaine on a piece of aluminum foil. Hold the foil over an open flame at a distance that will allow the cocaine to evaporate slowly. Pharmaceutical cocaine evaporates completely, while illicit cocaine will leave an amber hue. A sugar cut will burn black, the pro-caine will bubble before evaporating. Other cuts such as mannitol or quinine will burn as clean as pharmaceutical cocaine.

Methonal is used as a method of determining the approximate bulk of adulteration present. The idea is to determine the amount of adulteration in the cocaine by dissolving the sample. Cocaine will dissolve completely, and the remaining substance will be an adulterant. The results of this test are suspect due to the many possible adulterants which are also alcohol-soluble. Also, the quantity of cocaine needed to make this test meaningful are prohibitive to the small cocaine consumer.

ALTERNATIVE TESTS

Water can be used in place of clorox, but the results are far less definitive. Cocaine will skitter on the surface of water and disappear. Generally, most hits fall to the bottom. In hasty circumstances, this test could serve as a quick measure of the purity in the purchase.

If a microscope is readily available, it is a good practice to take a close look at your purchases. Cocaine crystals are a natural formation and are all irregular. If there are uniform crystals present, it will be a cutting agent. (*Refer to color section for comparative examples.*)

Because of the variables present in most consumer tests, the clorox test is highly recommended to all users and buyers of cocaine. By crossing the results of the melt point test and the clorox test, the results can be exceptionally definitive. If one test gives the tester a confused reaction, the other test will in almost every case explain the confusion. For example, procaine will melt at 165 to 169°C., much in the same manner as cocaine, and at approximately the same range of the melting point of mannitol. However, the reaction of procaine in clorox is so definite, there is no chance of missing it when both tests are used. If the melting point rises above 200°C., a quick referral to the clorox test will confirm or deny the presence of amphetamines. It is strongly recommended the clorox test be administered just prior to the melting point test. This will alert the tester for what to expect and will aid in analyzing the reaction to the melting point test.

Always, the final determinator of whether a purchase should be made must be its effect upon ingestion. There are many different kinds of cocaine with subtle differences in the high. After performing your tests and ascertaining what is present in the substance, the quality of the high can only be measured by trying it.

APPENDIX I Cocaine Addiction

Is cocaine use addictive or habit-forming? Can the use of cocaine be discontinued with no discomfort or ill effects? Seldom in recent history has an inquiry been met with such diverse and conflicting responses. Medical authorities and researchers have not only disagreed, but their disagreement has been emotional. In the ranks of the cocaine users, the opinions are no less diverse. The difference of opinion is significant and deserves inspection.

Dr. Sigmund Freud published *Über Coca* in 1884. At that time, his opinion was ". . . that a first dose or even repeated doses of coca produce no compulsive desire to use the stimulant further; on the contrary, one feels a certain aversion to the substance." Freud also remarked on the value of cocaine use in breaking the morphine habit: "The treatment of morphine addiction with coca does not, therefore, result merely in the exchange of one kind of addiction for another—it does not turn the morphine addict into a 'coquero'; the use of coca is only temporary." In a lecture given in March of 1885, Freud modified his stand slightly to state that the cocaine treatment for morphine addiction was not helpful in some cases, but invaluable in others. He again stated he had seen no cases of cocaine addiction.

In July 1885, Emil Erlenmeyer, a well-known German authority on morphine addiction, refuted Freud's findings by calling cocaine addictive and the "third scourge of the human race." Six months later, Obersteiner (a personal friend of Freud's and one of the first supporters of therapeutic cocaine use) stated that severe mental disturbances similar to delirium tremens had been produced by cocaine use.

In 1886, Dr. W.A. Hammond, Surgeon General of the U.S. Army, Ret., at a meeting of the New York Neurological Society, and again in 1887, in an article published in the November edition of the *Virginia Medical Monthly*, stated there was no habit as such. He elaborated by advising there was no weakening of the will-power nor craving for the drug. He equated cocaine use with a smoking or coffee habit. This drew a barrage of fire from several sources, led by a Dr. Hugh M. Taylor of Richmond, Virginia. Dr. Taylor expressed surprise at Dr. Hammond's findings and stated he had been a personal witness to a case which had ended in delirium which lasted several weeks and had convinced him of the dangers of the cocaine habit. Dr. Hammond answered Dr. Taylor with the contention that Taylor's friend was a case of preference, not addiction.

Freud felt compelled in July of 1887 to defend Dr. Hammond's paper. He

stated again there were no known cases of cocaine addiction, but modified his original position by stating that morphine addicts were subject to the habit. He further elaborated that the morphine addicts were less addicted to cocaine by the nature of the drug than by their own peculiarity.

Underlying Freud's defense of his original findings on cocaine was the personal experience and tragedy of his friend, Ernst Von Fleischl-Marxow. Fleischl suffered from a painful disease of the nervous system. He was taking morphine for the pain and was strongly addicted to the painkiller. Freud suggested he use cocaine to combat both the pain and the addiction to morphine. Fleischl became the first known morphine addict to be cured from his habit by the use of cocaine. However, as time went on, Fleischl also became Europe's first known cocaine addict. Freud's professional expertise was under attack for his works on cocaine, and he felt compelled to respond to these attacks. At the same time, one of his closest and most admired friends was daily being decimated by the use of cocaine. This was an extremely tragic episode in Freud's life. Fleischl died of his nerve disorder in 1891, which was compounded by physical and mental deterioration brought on by habitual cocaine use.

Around the same period of time in New York, another prominent physician, William Halsted, leading surgeon at John Hopkins School of Medicine, became addicted to cocaine while doing research on its use as a local anesthetic. At one point, he was kidnapped by his friends and sent on a long sea voyage to isolate him from his habit. The attempt failed, and he resumed the habit on his return. After two lengthy sessions in Butlers Hospital, he was reported cured. Many years after his death, it was reported that Dr. Halsted was cured by the substitution of morphine for cocaine, and he remained addicted to morphine for many years, possibly until he died in 1922.

In 1901 Dr. W. Golden Mortimer wrote in *History of Coca*: ". . . there has been no reported case of poisoning from coca, nor cases of coca addiction commonly regarded as 'habit.'" He based his findings on the research done in the 1880s by medical circles and on his own survey done in 1897 by mail to 5,000 doctors nationwide. He obtained 1,206 responses and published the results as an appendix in the *History of Coca*.

Richard Woodley tried to come to terms with the conflicting opinions on cocaine addiction in *Dealer: Portrait of a Cocaine Merchant*. After extensive research, he states his findings: "A search for answers is frustrating. One source says cocaine is addicting, another says that it is not; one says that cocaine abuse is widespread, another that it is not." Woodley states also in a synopsis of the effects of cocaine taken from clinical sources: "Withdrawal from heavy cocaine use may be severe, producing extreme fatigue, depression, paranoia, and even psychosis." Implicit in this statement is the indication that many people experience difficulty in discontinuing the use of cocaine. However, also implicit in the same

statement is the indication that many people do not experience this difficulty.

With findings this diverse, it is interesting to note what is said about the addictive capabilities of cocaine by the regular users of the substance. The following is a selection of responses to a survey on addiction, conducted by the author with California users and abusers of cocaine:

"It's a great high, and I never turn it down when it is offered. If I can't afford it, I don't miss it." (A 22 year old unemployed female who described herself as an occasional user.)

"I can't be trusted with it. Anything else is fine, but when I am selling cocaine, I can't stop using it. I don't simply snort up my profits; I won't quit until there is no more." (A thirtyish self-described male marijuana dealer.)

"Sometimes I use it steadily for a few days, then suddenly I can't stand the sight of it. I don't want to do it; I don't want to see it around; I don't even want to be around someone who is high on it. It's strange." (A twenty-eight year old male blue collar worker.)

"Once in a while, it's good to do. I don't have any trouble stopping. If I don't want to get high, I don't. I don't find it addicting. However, some of my friends seemed to get strung out. I have even seen them sell personal possessions cheaply in order to score some coke." (A twenty-four year old female graduate student.)

"I could quit if I wanted to. I just don't want to." (A twenty-seven year old male unemployed veteran.)

"I used it steadily for about two years, and sporadically until several months ago. Suddenly I stopped. It wasn't anything in particular, it just seemed to no longer have a place in my life." (A male truck driver, age 33.)

Again, differences in opinion and a variety of attitudes. This shows that the addiction to cocaine is highly personal, saying more about the person than the nature of cocaine. The question is: what are the personal differences that lead to addiction?

A clue may be found in living situations such as poverty, boredom, or lack of a meaningful existence. In 1969, Dr. Otto Nieschulz published the results of his research on cocaism and cocainism in "Munchener Medizinische Wochenschrift." In this report, he made reference to a report from the *U.N. Representative Commission Enquiry on the Coca Leaf*, 1950, which stated: "Coca is not the reason for poverty, but rather, the result of it, and we can reckon on a reduction of coca use, given the appropriate improvements." Dr. Nieschulz further states: "An impoverished life under harsh environmental conditions seems easier to bear. Dissociation from everyday environmental influences may have been the prerequisite for the religious experience of Indian priests at their rites . . ."

As progressive as these ideas sound, they are not new. Even while Freud and his contemporaries were fighting a pitched battle over whether cocaine was

addictive, Dr. Frank W. Ring, a New York physician, published an account of his personal experiences in the *Medical Record*, September 3, 1887. In this account, he states: "Pernicious habits are not acquired in ten days. Time does the business. Neither are they formed in men of strong and determined wills—men like Dr. Hammond, who have not the time to devote to such fanciful and illusory moments. But, take a man who is ill, downhearted, unable to work, and subject him to my experience, and what would become of him? Would he not be in imminent danger of becoming a cocaine 'habitue'?"

There are numerous references to "psychological addiction" and addictive personalities. Mortimer refers to these instances as follows: "The fact is there exists a certain class of subjects who are so weak in will power, that, if they should repeat any one thing for a few consecutive times they would become habituated to that practice. But such cases are the exceptions and have no especial bearing upon Coca." He further states: "Neurotics are prone to excesses as well as to extremes in any particular line. They are the class to which "habits" cling and "habit drugs" belong, and the apparent candor of their sufferings might often lead the sympathetic, unwary listeners astray. In such subjects these habits and excesses should be regarded rather as symptoms than the underlying cause of the condition."

Edward M. Brecher in *Licit and Illicit Drugs*, has presented a clear picture of some of the individual personal characteristics which can lead to addiction: "Why was Freud, unlike his friend Fleischl, able to use modest doses of cocaine—30 to 50 milligrams injected under the skin—from time to time for three years without developing either a craving for the drug or a need to escalate the dose? At least three alternative explanations are available. Dr. Jones, a psychoanalyst, believed that it requires an "addictive personality" to establish an addiction; lacking an addictive personality, he declares, Freud did not become a cocaine addict. (He did, however, become addicted to cigars, as described in Chapter 24.) The other two explanations are pharmacological.

"One holds that there must be some biochemical difference—perhaps a difference in enzymes—between people like Freud, who can take a particular addicting drug without becoming addicted and people like Fleischl who escalate the dose and become addicted. This hypothetical difference in enzymes may (or may not) be hereditary. The third explanation relates the addiction (or lack of it) to dosages and frequency of use. Because Freud took cocaine only occasionally, according to this theory, he had no need to escalate his dose. And because he did not escalate the dose, he did not become addicted. Some other explanation, of course, may ultimately prove true."

APPENDIX II Discontinuing Cocaine Abuse

In any discussion regarding cocaine addiction, the problem is not the absence of facts; there are more than enough facts available. The problem lies in resolving the conflicts between the facts and relating them to the personal use of cocaine.

There seems to be no physical addiction. The physical effects of cocaine used in moderation are mild except when injected or used over extended periods of time. In *Licit and Illicit Drugs*, Edward M. Brecher states; "A cocaine user, even after prolonged use of large doses, does not, if deprived of his drug, suffer from a dramatic withdrawal syndrome. The physical effects of cocaine withdrawal are minor." This should not be interpreted to mean that no one becomes addicted to cocaine. It merely means that regular use of the drug does not create a physiological need for the drug.

Some people are content with occasional use of cocaine, while others acquire a habit. Of those that acquire the habit, some acquire it by inclination or preference and are able to discontinue use without severe discomfort. But what about those who feel compelled to use cocaine to the point of debilitation. If cocaine is not addicting, why are people drawn to its use? If the answer does not lie in the body, it must lie in the mind and in life.

The key to kicking any habit is personal desire. Until there is desire to quit smoking, drinking, cocaine use or television viewing, most attempts will end in failure. If you find you are afflicted with a cocaine habit, and you find it is hurting your life physically and spiritually, you must find and nurse the desire to stop the use of cocaine.

Sometimes it is hard to recognize such a habit. Mr. Brecher states that cocaine withdrawal "... is characterized by a profound psychological manifestation—depression—for which cocaine itself appears to the user to be the only remedy ..." In other words, 'coming down' from a cocaine high leaves you depressed, a depression you do not associate with the euphoric effects of cocaine. You feel the cocaine remedies this depression and fail to recognize that the depression is caused by the initial dose.

You should be aware of the effects of cocaine on mental processes. Louis Levin wrote a description of these effects in his 1924 book, *Phantastica*: "Will-power diminishes, and indecision, lack of a sense of duty, capricious temper, obstinacy, forgetfulness, diffuseness in writing and speech, physical and intellectual

instability set in. Conscientiousness is replaced by negligence, truthful people become liars and the lover of society seeks solitude." Lewin's statement describes a composite effect. Not all people feel all these emotions; with some the effects are not pronounced; still others feel the effects quite intensely. If you have a cocaine habit, it is hard for you to view objectively the effect on your life. If you can't decide whether or not you are using too much cocaine, your indecision is a good indication that you are.

If you are an irrational or insecure individual, you may consider it impossible to discontinue cocaine use. You will have a tendency to feel you are incapable of quitting, so why try? Even if you understand the abuse of cocaine is detrimental to your physical and mental health, you will feel compelled to snort. The best method of countering addiction is to remove yourself physically from cocaine and the environment that will give your cocaine habit reinforcement. Once this has been done, you must understand you may relapse if you are again exposed to cocaine use. Strive to improve your self-esteem and learn to feel secure about your own identity. Both steps are extremely hard and your success in this effort must depend greatly on the people closest to you. If you are rationally motivated, understanding your reasons for abusing cocaine may be sufficient for you to control or discontinue your habit.

There is also an addiction that springs from a life which is so boring, unfulfilling, unmotivated, miserable or poverty-stricken that you feel the only way you can tolerate life on a day-to-day basis is to alter your mental state with chemicals. This must be countered on both the personal and social level. If you are abusing cocaine because you find life boring or unmotivating, you have to realize the problem lies in your own perspective. The key lies in desire. If you desire a change in your drug habit, you must look for a way to change your life. You should combat boredom and lack of motivation by becoming involved in activities with people you admire, or which will give you personal satisfaction. The reinforcement you receive for your efforts will motivate you. The use of drugs in these instances will gradually be placed in perspective or discontinued. If your life is so miserable or poverty-stricken that you feel the need to use cocaine to enable you to cope with it, answers on a personal level are harder to find. If your condition of existence were improved, you would probably use cocaine sparingly as an occasional high or discontinue its use entirely. If it is in your power to improve your material position, you must have the desire.

When the power to improve your material position in life is not in your hands, there are other considerations. Governmental agencies, social agencies, and medical authorities approach the problem of drug abuse as basically caused by the properties of the drug. As long as this policy continues there will be widespread drug abuse. Only when meaningful attempts and coordinated efforts at improving the quality of life are made can there be progress made toward reducing or eradicating drug depen-

dency. As long as these agencies are allowed to ignore that basic truth, they will continue to abrogate the responsibility placed in their hands by the people of this country.

In closing, reference can be made to a statement made by Richard T. Martin in his paper, "The Role of Coca in the History, Religion, and Medicine of South American Indians," published in *Economic Botany* #24, 1970: "The easiest way to resolve the conflicting reports on the effects of coca use is to recognize the fact that, like any other potent medicinal agent, coca is beneficial when used appropriately and is detrimental when used in excess."

APPENDIX III Quinine Deaths

While researching available information and interviewing various people for this book, it became readily apparent that many users of cocaine are really unaware of what effects different adulterants have on the user, even when they are aware of what cutting agent is used on their cocaine. The lack of this kind of knowledge suggested a potentially dangerous situation and quickly became the dominant theme of this book. Further research led the author to a passage in the excellent all-purpose drug reference, *Licit and Illicit Drugs, The Consumers Union Report*, by Edward M. Brecher and the Editors of *Consumer Reports* (Little, Brown and Company, 1972).

The passage concerned a mysterious series of deaths from heroin adulterated with quinine which were subsequently named "Syndrome X" occurrences by New York City Chief Medical Examiner Doctor Milton Helpern. The Syndrome X phenomena is relevant to this work as quinine is often used as a cocaine adulterant. Several parallels exist between the experiences of the investigators of Syndrome X, the official non-reaction to these deaths, the experience of the users of the adulterated heroin, and the cocaine black market as it exists today.

The deaths in question first were noted in New York around 1943. Long labeled as heroin overdoses in the press and by the coroner's office, these deaths did not follow the classic heroin overdose symptoms. First, they occurred within minutes of injecting the heroin, instead of after an extended period of lethargy. Second, they were accompanied by massive flooding of the lungs, or pulmonary edema. Third, the evidence found at the scene of the death did not uphold an overdose conclusion. The equipment and remaining heroin samples found at the scene did not contain an abnormal concentration of heroin. Fourth, the autopsy did not support a heroin overdose theory, as both urinalysis and examination of the site of injection did not show a high concentration of heroin, or even an unusually high dose. Fifth, the Syndrome X death often happened to only one of a group of people, all of whom had taken the drug. If the death was due to a heroin overdose, it should have occurred in more than one of the participants.

Deputy Chief Medical Examiner Baden, Dr. Helpern's associate, addressed a meeting of two American Medical Association Drug-dependency Committees held in Palo Alto, California in February of 1969. Dr. Baden stated at that time: The majority of deaths are due to an acute reaction to the intravenous injection of the heroin-quinine-sugar mixture. This type of death is often referred to as an

'overdose,' which is a misnomer. Death is not due to a pharmacological overdose in the vast majority of cases."

Quinine first appeared in New York heroin samples around 1940. As it was discovered that the quinine contributed to the initial rush and also, due to its bitter taste, made it hard for the buyer to ascertain how adulterated his purchase was, it rapidly became "the" agent for heroin adulteration, and continues as such to this date.

Doctor F.E. Camps, investigating pathologist for the United Kingdom Home Office, stated in London in 1966: "The only comparable drug to heroin which causes rapid death with pulmonary oedema is quinine. In this case patients start off with discomfort in their chest, then rapidly die."

With notable laudable exceptions, including Dr. Helpern, Dr. Baden and Dr. Camps, the fact remains that people were dying for twenty years from Syndrome X occurrences without official recognition or concern. Although the victims did not exhibit classic symptoms of heroin overdose, the official reaction to their deaths seems to have been one of little concern. Since the victims were heroin users that died while using heroin, officialdom seemed to find it easier to classify their deaths as overdoses and close the files, than to find the actual cause. If these users had understood the implications and had available a system for the detection of quinine, it is probable many would be alive today. Without this information, they didn't stand a chance.

The first conclusion to be drawn from this information by the user of cocaine is that neither the black market businessman nor official governmental agencies are really concerned about the welfare of the user of black market drugs. The consequences of this lack of concern are tragically evident in the Syndrome X experience. The user must make the effort and take the responsibility on himself to ensure that the drugs he ingests are not more harmful than they can be in their natural state.

The second conclusion to be drawn is more immediate. Quinine is to be avoided at all costs. It has been a fairly common agent for cocaine adulteration for some time and is becoming even more prevalent. In addition to the hard medical evidence so far uncovered, conversations with users of cocaine indicate the high imparted by quinine does not blend with cocaine as it does with heroin. In fact, the cocaine high is injured by the presence of quinine. Users of cocaine who have been exposed to quinine-adulterated cocaine over a period of just a couple of days have reported vision difficulties, ringing in the ears, sometimes breathing difficulties and abnormal abrasion of the nasal passages.

Finally, it is impossible to imagine the number of Syndrome X deaths which could have been attributed to cocaine use if the prevalent method of ingestion of cocaine were injection, as it is with heroin. This contrast is an extremely graphic argument against the injection of any drugs. Although some users state injection is the quickest way to a high, it is obviously extremely dangerous.

CHRONOLOGY

by E. Throx

Before 1200 (A.D.) — It is believed that coca (*Erythroxylon coca*) originated in Bolivia in the region of Machu Yunga. The cultivation and use of coca then spread to the northern regions of South America.

1230 — The Incas, Maytu Capac and his successor Rocca were largely responsible for the wide distribution of coca chewing in South America. The Incas regarded coca as a divine plant and worshipped it as such.

According to the Inca legend, the children of the sun presented mankind with coca to "satisfy the hungry, provide the weary and fainting with new vigour, and cause the unhappy to forget their miseries."

1400s — Coca use is widespread among the Incas.

1533 — Francisco Pizarro finds coca in general use when he penetrates with his troops into the interior of Peru.

1550 — The second Council of Lima, a conquistadore governing body, issued a canon in an attempt to restrict the use of coca leaves by the Peruvians, Chileans, and Bolivians. The canon described coca as "a useless object liable to promote the practices and superstitions of the Indians."

Rules against coca use were not enforced because the Spanish realized that the natives worked harder under its influence.

From the 1600s until the 1800s (when coca was handled by private enterprise), coca was a state monopoly.

1569 — Nicholas Monaodes, a Spanish physician, publishes the first description of the beneficial effects of coca in combatting fatigue and hunger.

1749 — Coca is brought to Europe, botanically described by Jussian and classed with the genus *Erythroxylon*.

1786 — The coca plant appears in Lamarck's *Encyclopédie Méthodique Botanique* under the name *Erythroxylon coca*.

1859 — Paolo Mantegazza, an Italian neurologist who had lived in the coca-growing regions of South America, published "On the Hygenic and Medicinal Virtues of Coca." This paper inaugurated an era of scientific investigation of the properties of coca and its alkaloids.

1859 — A batch of coca leaves is brought to Vienna from South America by Dr.

Scheozer, a member of an Austrian expedition which circled the world on the frigate Noviera. These leaves were sent to Prof. Wöhler of Gottingen for examination.

1860 – Cocaine is extracted in pure form from coca leaves. Albert Niemann, a student of Prof. Wöhler, is usually given credit.

However, in 1855, another chemist named Gardecke isolated from coca leaves an alkaloid which he called erythroxylin. There is quite a bit of controversy over who made the first isolation.

1862 – Professor Schroff documents the numbing effects of cocaine, pointing out that it numbs the tongue, narrows the peripheral arteries and widens the pupils.

Although these anaesthetic effects had been known to native users of coca since time immemorial, it took until the latter 1800s for these findings to reach medical science.

1880 – Cocaine is listed as an official drug in the U.S. Pharmacopoeia.

1880 – Bently and Palmer, American doctors, report the treatment of opiate addiction with cocaine.

1883 – “Die Physiologische Wirkung und die Bedeutung des Cocains” is published in a German medical journal. The author, Dr. Theodore Aschenbrandt, secured a supply of cocaine from the pharmaceutical firm of Merck and issued it to Bavarian soldiers during their autumn maneuvers. He reported on the beneficial results of the drug in increasing the soldiers’ ability to endure fatigue.

1884 – A young, poor, but ambitious twenty-eight year old neurologist, Dr. Sigmund Freud, treats his depression with cocaine and reports “exhilaration and lasting euphoria, which in no way differs from the euphoria of the healthy person . . . You perceive an increase in self-control and possess more vitality and capacity for work . . . In other words, you are simply more normal, and it is soon hard to believe that you are under the influence of any drug.”

1884 – Freud begins “treating” morphine addicted friend Ernst von Fleischl-Marxow with cocaine. Von Fleischl-Marxow suffered from an extremely painful disease called neuromata.

1884 – Freud published *Über Coca*, his first paper on coca and cocaine.

1884 – Carl Koller tries cocaine in the eye of the frog and the man and discovers its local anaesthetic effects.

1884 – An American physician, Dr. Wm. Halsted reported that an injection of cocaine into a nerve blocks conduction of sensation, producing local anaesthesia.

Dr. Halsted became habituated to cocaine, but later gave it up for morphine.

1884 – Angelo Mariani, a Corsican living in Paris, mixed an extract of coca leaves with a fine wine and thus invented a new drink which he marketed as Vin Mariani. This wine was used by the most distinguished figures of the time, including clergymen, royalty, writers, artists, soldiers and politicians.

1885 – John Styth Pemberton, a resident of Atlanta, Georgia who sold patent medicines, marketed a syrup containing both an extract of coca leaves and extract of kola nut. He called this Coca-Cola.

1885 – Freud’s second paper on cocaine, “A Contribution to the Knowledge of the Effect of Cocaine,” is released.

1885 – Von Fleischl-Marxow, injecting increasing amounts of cocaine, becomes psychotic and experiences “cocaine bugs.”

1885 – Louis Lewin, who later wrote *Phantastica* (the most complete work at the time on psychoactive drugs) attacks Freud’s views on the harmlessness of cocaine.

1888 – Arthur Conan Doyle publishes *The Sign of the Four* in which Sherlock Holmes intravenously injects cocaine.

1905 – Procaine (Novocaine) is synthesized. This new drug eventually replaced cocaine as an anaesthetic because of its comparatively low toxicity.

1906 – In compliance with the Pure Food and Drug Act, the Coca-Cola company removes cocaine from Coca-Cola and substitutes an extract from “de-cocainized” leaves. Although these leaves may contain other bioactive compounds, they are still being used today.

1908 – The chief of police in Washington, D.C., wrote “. . . the cocaine habit is by far the greatest menace to society because the victims are usually vicious. The use of this drug superinduces jealousy and predisposes to commit criminal acts.” The early 1900s saw the rise of anti-cocaine hysteria.

1910 – Dr. Hamilton Wright, considered the father of American anti-narcotics legislation, reported that some employers gave cocaine to their black employees to make them work harder. This marks the beginning of the drug’s association in the media with black people. Later, cocaine is indicted by both racist and prohibitionary press as a drug which causes blacks to engage in rape and other acts of violence. Cocaine is credited with giving superhuman strength to blacks, enabling them to withstand large caliber bullet wounds without dying.

By 1919, most of the black violence was no longer blamed on cocaine, but on “subversives” such as the Wobblies and Bolsheviks.

1914 – Cocaine begins to be associated with sexual license. *The New York Times* reports that “a young man, who has not been identified, went insane from co-

caine poisoning in Battery Park last evening and ran about like a madman. He seized several women who were taking the air on the benches and soon the park resounded with their screams."

1930s — Germany surpassed Peru and became the leading consumer of coca-products, especially cocaine. This is the first time that a European country ranks first in global consumption. The head of the Nazi Luftwaffe, Herman Goering, is habituated to both cocaine and morphine.

1941-1945 — During WWII the American, British, German and Japanese armed forces issued amphetamine to their troops to counteract fatigue, elevate mood, and heighten endurance. Amphetamines were taken orally and found to be longer lasting and more stimulating than cocaine. After WWII, many physicians prescribed amphetamines for depression and obesity. When these new drugs were introduced, a decline in cocaine use ensued.

In the fifties "speed freaks" began injecting amphetamine in high doses. This abuse of amphetamines continued into the middle sixties and by the late sixties reached tremendous proportions. Many long-term abusers of amphetamine in high doses experienced psychosis and malnutrition. As a result of this abuse, speed was attacked by both the counterculture and the straight press. In the late sixties amphetamine use subsided. Curiously, cocaine use began to blossom again.

1970 — The Comprehensive Drug Abuse and Control Act is passed by Congress and made Federal Law. Oddly enough, cocaine is still classified as a narcotic—even though in reality it is a stimulant.

1970 — Cocaine use mushrooms during the "sniffing seventies." The modern users can be distinguished from earlier users by the way in which they administer the drug. Rather than drinking coca preparations, or injecting the drug intravenously, intramuscularly or subcutaneously, most modern users prefer to "sniff (snort)" it.

BIBLIOGRAPHY

- CEREMONIAL CHEMISTRY**—Szasz, Thomas: Anchor Press, Garden City, NY, 1975. Puts drug use in America in proper perspective.
- THE COCA LEAF AND COCAINE PAPERS**—Andrews, George, and Solomon, David: Harcourt Brace Jovanovich, New York, NY, 1975. Includes excerpts from the most important works with the exception of Freud.
- COCAINE**—Ashley, Richard: St. Martin's Press, New York, NY, 1975. Realistic and well written overview includes much useful information.
- COCAINE**—Pitigrilli: And/Or Press, San Francisco, Ca., 1975. Witty journalistic novel about the Paris cocaine scene in the 1920s.
- THE COCAINE PAPERS BY SIGMUND FREUD**—Byck, Robert, ed., with notes by Anna Freud: Meridian, New York, NY, 1975. Documents early experimentation with cocaine, and relationship with the development of psychoanalysis.
- DEALER: PORTRAIT OF A COCAINE MERCHANT**—Woodley, Richard: Warner Paperbacks, New York, NY, 1975. An accurate description of Cocaine dealing in big American cities.
- DRUGS AND MINORITY OPPRESSION**—Helmer, John: Seabury Press, New York, NY, 1975. Politics of drug laws, including chapter on cocaine.
- THE GOURMET COKEBOOK**—Chasin, Daniel: DC Productions, 1974. The first but inaccurate "hip" book on cocaine.
- HISTORY OF COCA: THE DIVINE PLANT OF THE INCAS**—Mortimer, W. Golden: And/Or Press, San Francisco, Ca., 1975. The classic and most complete book on coca and cocaine.
- LICIT AND ILLICIT DRUGS**—Brecher, Edward M., and the editors of *Consumer's Reports*: Little, Brown & Co., Boston, 1972. Highly recommended overview for anyone that consumes legal or illegal drugs.
- THE SEVEN PERCENT SOLUTION**—Meyer, Nicholas: Ballantine Books, New York, NY, 1975. Sherlock Holmes meets Freud in Paris in this acclaimed historical novel.

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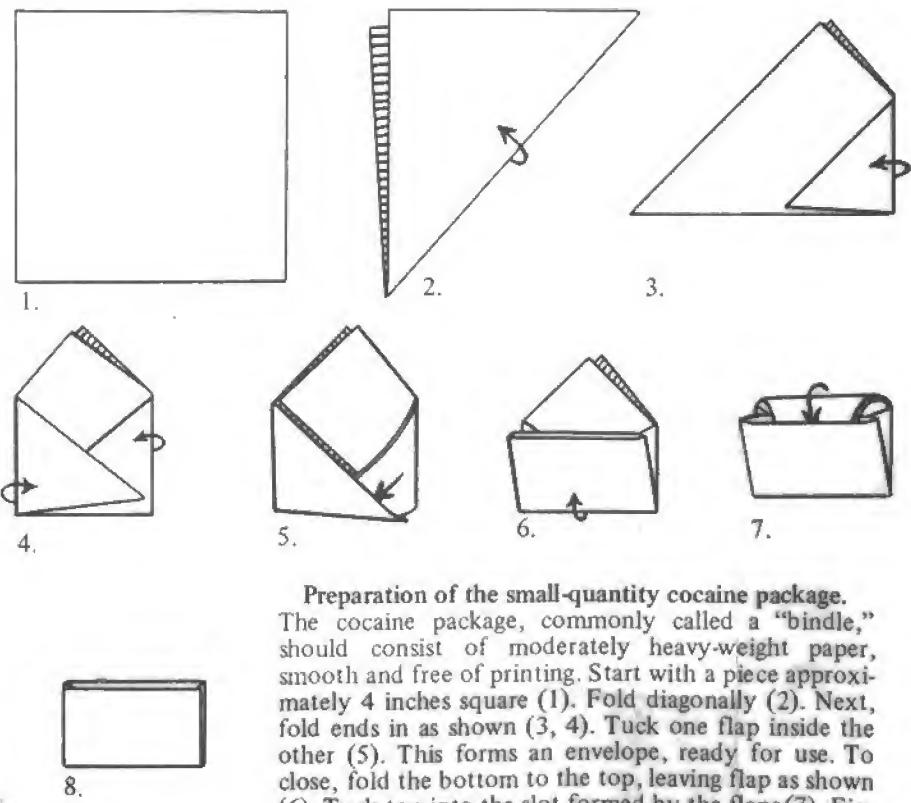
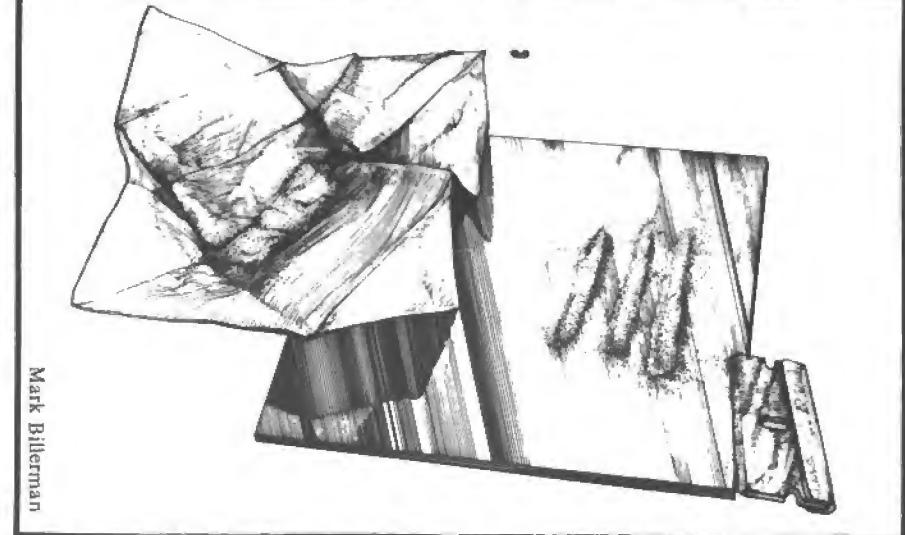
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The cocaine package, commonly called a "bindle," should consist of moderately heavy-weight paper, smooth and free of printing. Start with a piece approximately 4 inches square (1). Fold diagonally (2). Next, fold ends in as shown (3, 4). Tuck one flap inside the other (5). This forms an envelope, ready for use. To close, fold the bottom to the top, leaving flap as shown (6). Tuck top into the slot formed by the flaps(7). Finished packet (8). Now stash it!